G. japonica called patruelis or tabuensis by some authors, but which is probably not really that species. The much depressed form like a thick lens, the open umbilicus and want of spiral striæ are its more prominent features. It is named in honor of FRIEDRICH WIEG-MANN, of Jena, author of numerous and valuable works on the anatomy of land snails.

A NEW LYROPECTEN.

BY W. H. DALL.

The group of Pectinidæ named by Conrad Lyropecten, of which *P. Heermanni* Conrad is the type, is known to have its precursors in the Oligocene, to be in its developed form characteristic of the Miocene of the Northern Hemisphere on both sides of the Atlantic, and to be represented in succeeding horizons only by degenerate types which can hardly be referred to the same section of the genus, though apparently descended from it.

The Pacific coast species hitherto known are *P. Heermanni* Conrad, 1855 (+ *P. estrellanum* Conrad, 1856, not 1857); *P. magnolia* Conrad, 1857 (+ *P. crassicardo* Conrad, 1862). The first mentioned is a species of moderate size with no analogue in the Atlantic Miocene; its exact horizon is still doubtful. The second, which corresponds in the West American fanna to *P. Jeffersonius* Say is found in the upper or San Pablo horizon of California. From the still newer (?) horizon of Rio Dell on the Eel River, California, Mr. J. S. Diller of the U. S. Geological Survey has obtained a new form of which this preliminary notice is given, not only as a new species of interest but as one of the largest species of *Pecten* yet known. It will be illustrated later in the Survey publications. It is the analogue of *P. Madisonius* Say.

Pecten (Lyropecten) Dilleri n. sp.

Shell large, rather compressed, nearly orbicular with a relatively short, straight hinge-line, dorsally rectangular, nearly smooth, subequal ears, the posterior with three small riblets; a well marked though shallow byssal fold; and moderately thick valves. The right valve is somewhat more convex and strongly sculptured, bear-

¹ By permission of the Director of the U.S. Geological Survey.

THE NAUTILUS.

ing 29-30 high, narrow, T-rail-shaped ribs, flattened above, overhanging narrower, deep, nearly smooth channels; and with marked concentric imbrication, feeble on top of the ribs but articularly scaly at their sides. The sculpture of the left valve is less pronounced, hidden in the matrix, but apparently similar. Alt. 192, lat. 175, diam. about 35 mm. The lateral edges are slightly defective, the submargins very narrow.

GENERAL NOTES.

HOLOSPIRA MINIMA V. Martens.—In my opinion the northwest Mexican forms referred to *Holospira pfeifferi* by Crosse and Fischer and von Martens, are distinct from that central Mexican species; and as the varietal name *minor* is preoccupied (*H. teres* v. *minor*), the name *minima* of von Martens may be used.

Dr. von Martens describes var. minima as "dense tenuiter lamelloso-costata, length $11\frac{1}{2}$ mm. only, 4 in the largest diameter; aperture $2\frac{1}{2}$ mm.; whorls 11, distinctly convex; color reddishyellow, the costæ white." The locality was not known, but the figure shows the angular early whorls of the N. W. Mexican form described as a variety of *pfeifferi* by Fischer and Crosse, and I do not doubt that the type came from that region.

The shells collected at Hermosillo, Sonora, by Rémond, are larger, alt. $12\frac{1}{2}$ to $13\frac{1}{2}$, diam. of penult. whorl 4 mm. The riblets are rather stout and crowded, though not quite as wide as their intervals, and number 32 to 34 on the penultimate whorl. These ribs, or many of them, have the peculiarity so strongly developed in *Urocoptis elliotti* and some other species, of being hollow, and therefore easily broken down, showing only the edges of the two lateral laminæ. There are $12\frac{1}{2}$ whorls, and the color is nearly uniform. The internal column is perfectly simple and the lumen of the whorls is free from folds or lamellæ of any sort.

Specimens sent by Mr. Fred L. Button, exact locality not given, are a little smaller, alt. $11\frac{1}{2}$ diam. above aperture 4 mm., have 11 to $11\frac{1}{2}$ whorls, and decidedly coarser ribs, 23 to 26 on the penultimate whorl.

Evidently the species is a variable one, and the varieties are probably local.

Tryon's figure of H. pfeifferi (Amer. Journ. of Conch. iii, pl. 15,

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